No. 712,924. Patented Nov. 4, 1902.

H. GEYER.

SWING.

(Application filed June 16, 1902.)

(No Model.) 2 Sheets—Sheet 1.

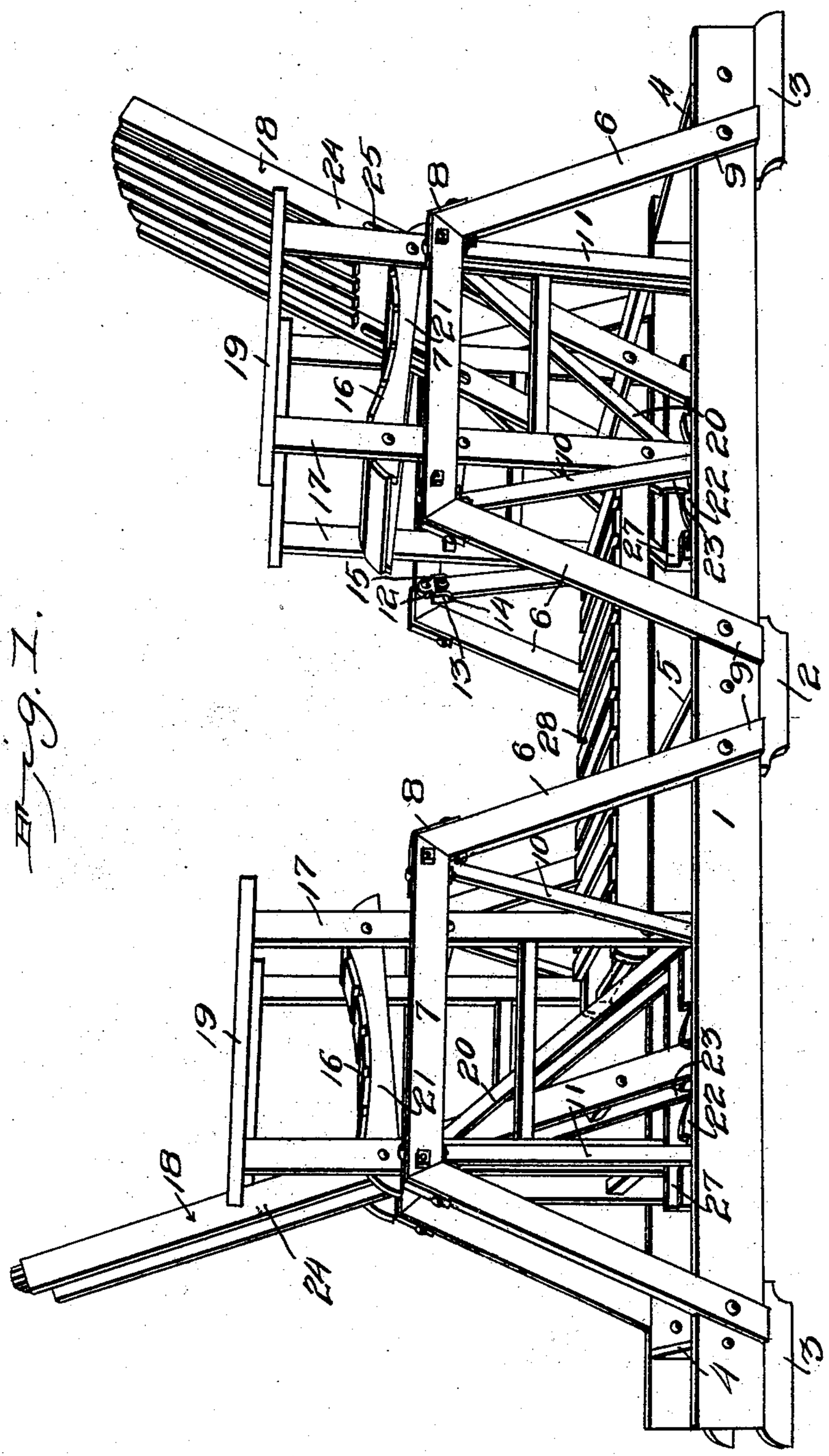

Fig. 1.

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Fig. 2.

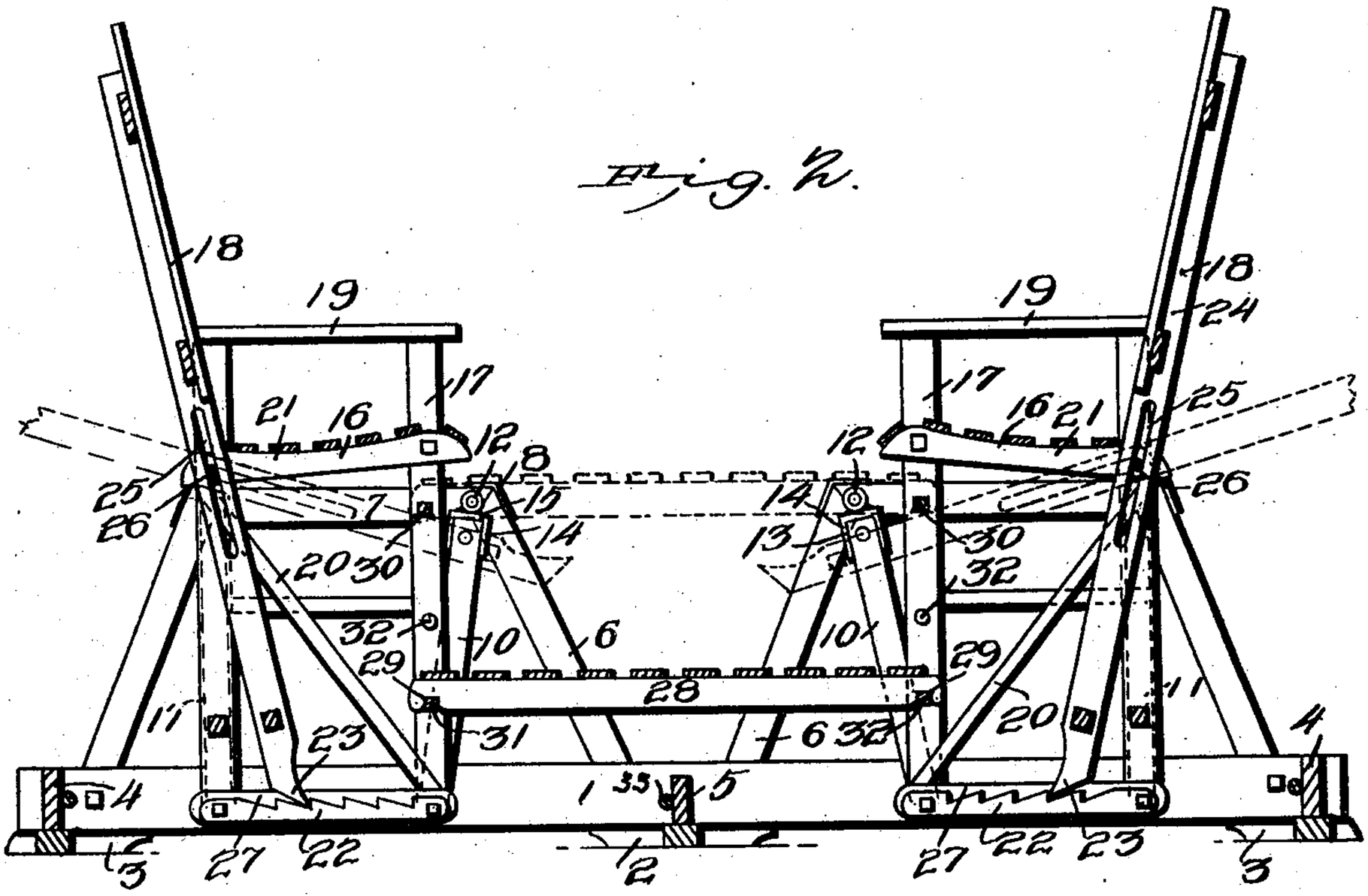


Fig. 3.

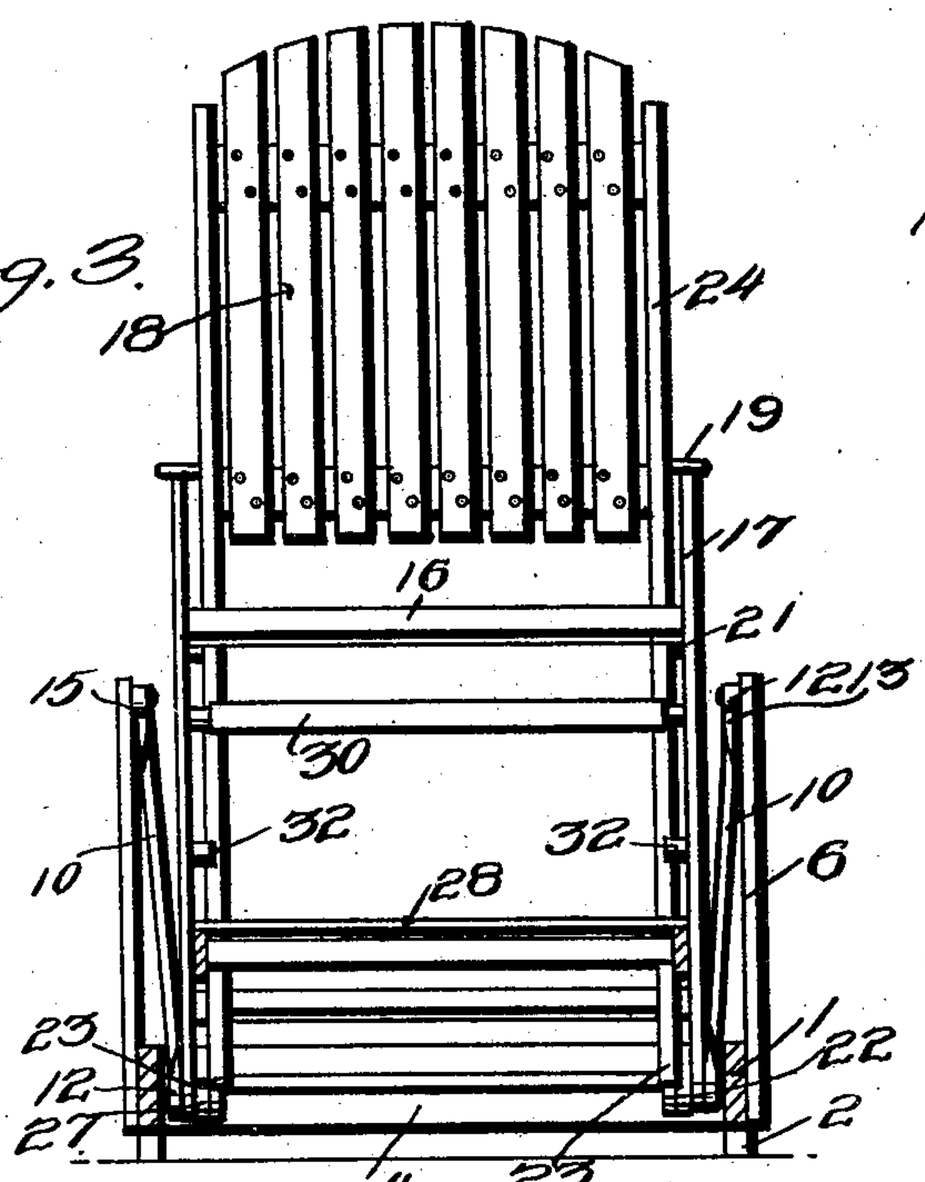
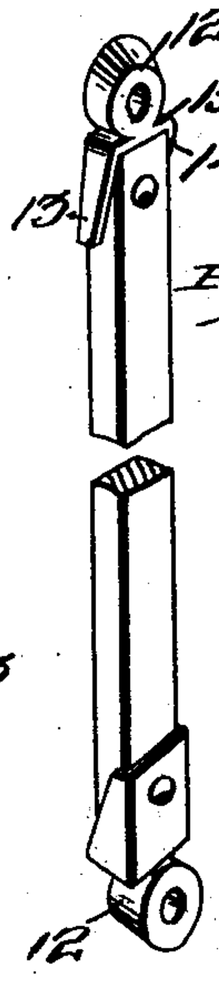


Fig. 4.



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UNITED STATES PATENT OFFICE.

HIRAM GEYER, OF GOSHEN, INDIANA, ASSIGNOR OF ONE-HALF TO REBECCA GEYER, OF GOSHEN, INDIANA.

SWING.

SPECIFICATION forming part of Letters Patent No. 712,924, dated November 4, 1902.

Application filed June 16, 1902. Serial No. 111,984. (No model.)

To all whom it may concern:

Be it known that I, HIRAM GEYER, a citizen of the United States, residing at Goshen, in the county of Elkhart and State of Indiana, have invented a new and useful Swing, of which the following is a specification.

The invention relates to improvements in swings.

The object of the present invention is to improve the construction of swings and to provide a simple and comparatively inexpensive one of great strength and durability which may be readily constructed and in which the supporting-frames will not extend above the seats and will be located a sufficient distance from the same so that there will be no liability of accidentally pinching the fingers between the seat and the side supports when the swing is in operation.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a swing constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view. Fig. 4 is a detail view of one of the oscillatory supporting links or bars.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a base provided with central and end feet 2 and 3 and composed of side sills and connecting end bars 4, and the said side sills are also preferably supported by an intermediate cross-bar 5. The feet 2 and 3 consist of blocks suitably secured to the lower edges of the side sills, as clearly shown in Fig. 1. Secured to the side sills are supporting-frames arranged in pairs and composed of inclined side bars or standards 6 and connecting-bars 7, arranged horizontally and secured at their ends to the upper terminals of the bars or standards 6, and the said supporting-frames are preferably reinforced at the adjacent ends of the bars or members 6 and 7 by angle plates or straps 8, bolted or otherwise secured to the outer edges of the said bars or members, as clearly shown in Fig. 1. The lower ends 9 of the upright side bars or standards 6 may be recessed to form shoulders for engaging the upper edges of the side sills to relieve the lower fastening devices of strain and to form a solid structure.

Chairs are hung from the upper portions of the supporting-frames by means of inner and outer oscillatory links or bars 10 and 11, provided at their upper and lower ends with eyes 12, receiving the pivots and having shanks 13, consisting of partial casings and receiving the terminals of the bars 10 and 11. Each shank or partial casing consists of a plate provided at the sides and outer end with flanges 14 and 15, as clearly shown in Fig. 4 of the drawings.

Each chair comprises a seat 16, a rigid seat-supporting frame 17, and an adjustable back 18, and the seat-supporting frame is composed of uprights or bars arranged in pairs at each side of the chair and connected at their upper ends by arms 19 and at their lower portions by horizontal side bars and cross-bars and inclined braces 20. The lower ends of the oscillatory links or bars are pivoted to the seat-frame at the lower ends of the upright bars or members of the same, and the seat 16 is provided with suitable side bars 21, which are secured to the upright bars of the seat-supporting frame. The seat-supporting frame is provided at its bottom with horizontal ratchet-bars 22, having teeth shouldered at their outer ends and adapted to be engaged by the teeth 23 of the lower ends of side bars 24 of the chair-back, and the said side bars 24, which are suitably connected and braced, are provided between their ends with longitudinal slots 25, receiving pivots 26. The slots 25 of the side bars of the chair-back permit the latter to be moved vertically sufficiently to disengage their lower ends from the teeth of the ratchet-bars to permit the chair-back to be arranged in a perpendicular or an inclined position, and the ratchet-bars will lock the chair-back at the desired adjustment. The inclined braces 20 are secured to the inner faces of the upright bars of the seat-supporting frame, and the ratchet-bars are offset from the planes of the inclined braces 20 by means of horizontal connecting-bars 27, and the side bars

21 of the seat offset the side bars of the back of the chair from the inclined braces 20 and enable them to swing freely backward and forward in adjusting the chair-back.

The chairs of the swing are caused to swing in unison by means of a horizontal platform 28, preferably composed of side bars and suitable connecting-slats and provided at the ends of the side bars with recesses 29 to receive upper, lower, and intermediate supports 30, 31, and 32 of the seat-supporting frames, whereby the platform is adapted to be arranged at different elevations to accommodate adults and children and also to form a bed. The platform 28 is arranged upon the lower supports to arrange the swing for adults and on the intermediate supports to arrange it for children, and when it is placed on the upper supports it connects the seats and forms a continuous support. When the platform is arranged at the top to form a bed, the backs of the chairs are disengaged from the ratchet-bars and are swung downward to an approximately horizontal position to form continuations of the seats. By this construction the parts may be readily arranged to form a bed, and when so arranged the chairs will oscillate in unison in the same manner as when they are arranged as shown in Figs. 1 and 2. By alternately pressing upon the chair-backs and the platform the chairs are oscillated, and the links impart a long swinging or oscillatory motion to the chairs, and the seats are located a sufficient distance above and away from the supporting-frames to prevent the fingers from being pinched during the operation of the swing. The parts of the swing are secured together by bolts and are adapted to be readily separated to enable the swing to be compactly shipped or stored, and the parts may be quickly assembled when desired. The connecting-bars of the base may be secured to the side sills in any suitable manner, and transverse bracing-rods 33 may be employed for preventing the side sills from spreading.

The upper and lower supports 30 and 31 consist of cross bars or rods having suitable notches or reduced portions to receive the platform, and the intermediate supports 32 consist of short projections or pins adapted to receive the platform and arranged beyond the side bars of the chair-backs to provide an open space to permit the side bars of the chair-backs to swing upward beneath the supports 30 when the parts are arranged to form a bed.

What I claim is—

In a swing, the combination of a base, supporting-frames secured to the base, links connected with the supporting-frames, seat-supporting frames pivotally connected to the links and provided with seats and having upper, lower and intermediate supports, the upper and lower supports consisting of cross-bars and the intermediate supports consisting of projections or pins, a platform adapted to engage the supports, and chair-backs pivotally and slidably connected with the seat-supporting frames and having side bars offset from the pins or projections and adapted to clear the same to permit the chair-backs to be swung downward to form a bed, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HIRAM GEYER.

Witnesses:
G. B. KESSLER,
B. F. DEAHL.